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ABSTRACT

Using data from the National Study of Postsecondary Faculty: 1993 (NSOPF:93) and the NSOPF of 1999 (NSOPF:99), this study focused on changes in the tenure status of full-time instructional faculty and staff at two- and four-year institutions between fall 1992 and fall 1998. It analyzed changes in tenure status by level and control of institution, program area, and the faculty's academic rank, gender, and race/ethnicity. These analyses are based on instructional faculty and staff, those with some for-credit teaching responsibilities. Data from the first 2 cycles of NSOPF show that the proportion of full-time instructional faculty and staff with tenure at postsecondary institutions decreased from 58% in 1987 to 54% in fall 1992. More recent NSOPF:99 data indicate that across all postsecondary institutions, 53% of full-time instructional faculty and staff were tenured in the fall of 1998. Another 19% were on the tenure track, but not tenured. Faculty who taught at four-year institutions were more likely to be on tenure track than those who did not. The gender gap was apparent in both 1992 and 1998, with male faculty more likely to have tenure (61% versus 40% of females). As did previous studies, NSOPF:99 found racial and ethnic differences in tenure status among full-time instructional faculty and staff. White, non-Hispanic faculty members were more likely to have tenure in four-year, but not two-year, institutions. Three appendixes contain technical notes, tables of standard errors, and a glossary. (Contains 15 tables, 4 figures, and 14 references.) (SLD)

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Tenure Status of Postsecondary Instructional Faculty and Staff: 1992–98

Statistical Analysis Report

U.S. Department of Education
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NCES 2002-210

Tenure Status of Postsecondary Instructional Faculty and Staff: 1992-98

Statistical Analysis Report

July 2002

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Executive Summary

In the recent past, postsecondary education has undergone dramatic changes that have required institutions of higher education to examine new ways to efficiently manage their limited resources (Chronister and Baldwin 1999). These changes—including increased enrollments of nontraditional students, reductions in state funding, increased availability of distance education instruction and technologies, and increased use of contingent and contract personnel—have led to a reexamination of key faculty issues such as salary, scholarly productivity, teaching performance, and tenure.

The literature examining tenure concerns has relied largely on data from two national studies conducted by the U.S. Department of Education, National Center for Education Statistics (NCES): the National Study of Postsecondary Faculty (NSOPF), conducted in 1988, 1993, and 1999; and the Integrated Postsecondary Education Data System "Salaries, Tenure, and Fringe Benefits of Full-Time Instructional Faculty Survey" (IPEDS-SA), conducted annually since 1987. Using data from NSOPF:93 and NSOPF:99, this report focuses on changes in the tenure status of full-time instructional faculty and staff at 2- and 4-year institutions between the fall of 1992 and the fall of 1998.[1] It analyzes changes in tenure status by level and control of institution, program area, and the faculty's academic rank, gender, and race/ethnicity. These analyses are based on instructional faculty and staff; that is, faculty and staff with some for-credit teaching responsibilities (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities).[2]

Tenure Status of Full-Time Instructional Faculty and Staff

The literature examining issues of tenure status at postsecondary institutions—some of it anecdotal—suggests a slight decline in the proportion of tenured faculty in recent years (Lee 1995; Chronister and Baldwin 1999; U.S. Department of Education 1997). Data from the first two cycles of NSOPF, for instance, show that the proportion of full-time instructional faculty and staff with tenure at postsecondary institutions decreased from 58 percent in the fall of 1987 to 54 percent in the fall of 1992 (U.S. Department of Education 1997).

More recent data from NSOPF:99 indicate that across all postsecondary institutions, 53 percent of full-time instructional faculty and staff were tenured in the fall of 1998 (figure A). Another 19 percent were on tenure track but not tenured. The remaining full-time faculty[3] either

[1]NSOPF:99 was conducted in 1999 and asked faculty and instructional staff about their activities in the fall of 1998. NSOPF:93 was conducted in 1993 and asked faculty and staff about their activities in the fall of 1992.

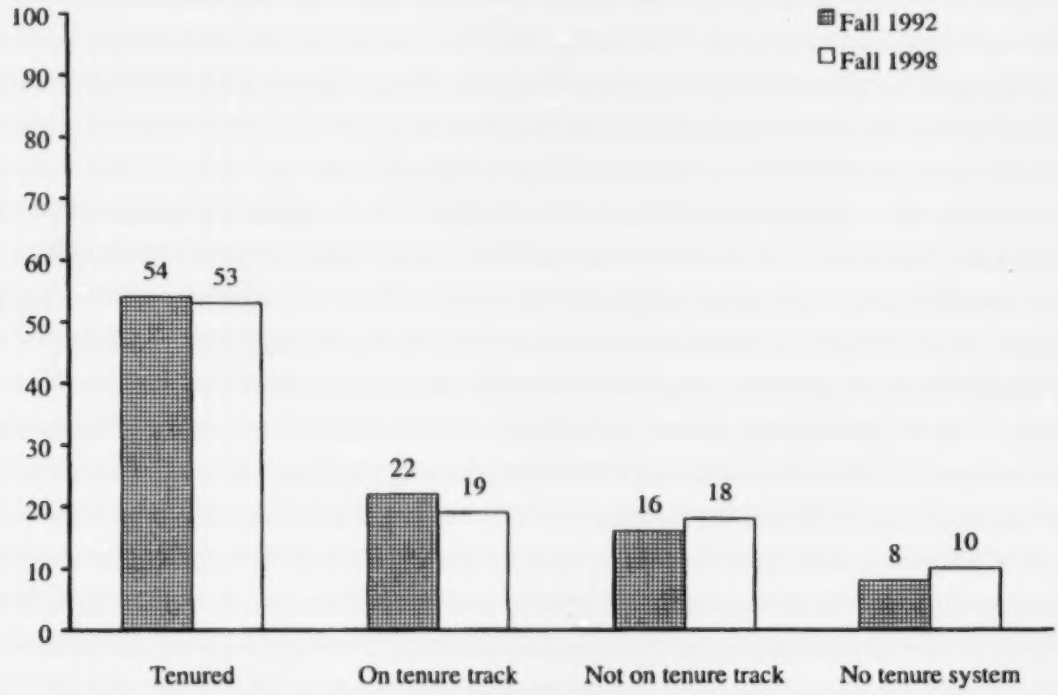
[2]Instructional faculty and staff represented 88 percent of all postsecondary faculty and instructional staff in the fall of 1992 and 91 percent in the fall of 1998. Fifty-eight percent of instructional faculty and staff were employed full time in the fall of 1992, and 57 percent of the faculty were employed full time in the fall of 1998.

[3]For brevity, this report sometimes uses the term "faculty" to refer to instructional faculty and staff.

were not on a tenure track although the institution had a tenure system (18 percent), or they taught in an institution that did not have a tenure system (10 percent).[4]

Between the fall of 1992 and the fall of 1998, while the proportion of full-time instructional faculty and staff on tenure track decreased from 22 to 19 percent, the total percentage of faculty who either were not on a tenure track or worked at institutions without a tenure system increased from 24 to 28 percent (figure A). Thus, whereas there were no significant differences in the percentage of tenured faculty between 1992 and 1998, the opportunities for future tenure declined during that period.

Figure A.—Percentage distribution of full-time instructional faculty and staff, by tenure status: Fall 1992 and fall 1998



NOTE: This figure includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities).

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1993 and 1999 (NSOPF:93 and NSOPF:99).

[4] The increase in the percentage of full-time instructional faculty and staff who worked at institutions that did not have a tenure system (from 8 percent in 1992 to 10 percent in 1998) may be due, in part, to an overall increase in the proportion of postsecondary institutions that had no tenure systems in place for their faculty. Data from the Institution Survey of NSOPF indicate that 29 percent of postsecondary institutions did not have a tenure system in the fall of 1992 (U.S. Department of Education 1996), compared with 34 percent in the fall of 1998 (U.S. Department of Education 2001b).

Tenure Status by Institutional Type

The tenure status of full-time instructional faculty and staff was examined across 4-year and 2-year institutions, and public and private institutions. In both the fall of 1992 and the fall of 1998, full-time instructional faculty and staff who taught at 4-year institutions were more likely to be on tenure track than were those who taught at 2-year institutions (table A).

Between the fall of 1992 and the fall of 1998, 4-year institutions showed both a decrease in the proportion of full-time instructional faculty and staff who were on tenure track, and an increase in the total percentage of faculty who either were not on a tenure track or worked at institutions without a tenure system (table A). Thus, while there were no significant differences in the proportion of *tenured* faculty between 1992 and 1998 for either 2- or 4-year institutions, the opportunities for future tenure declined at 4-year institutions.

In both the fall of 1992 and the fall of 1998, full-time instructional faculty and staff employed at public institutions were more likely than those at private institutions to have tenure (table A). Between 1992 and 1998, the proportion of faculty who were not on a tenure track at public institutions increased from 15 to 17 percent. Thus, as in 4-year institutions, the opportunities for future tenure declined at public institutions between 1992 and 1998.

Table A.—Percentage distribution of full-time instructional faculty and staff, by tenure status and level and control of institution: Fall 1992 and fall 1998

Level and control of institution, and year	Tenure status			
	Tenured	On tenure track	Not on tenure track	No tenure system
1998				
All institutions*	53.1	18.8	18.1	10.0
All 4-year institutions	53.9	19.7	20.7	5.7
All 2-year institutions	49.8	15.1	7.2	27.9
All public institutions	56.9	18.5	17.2	7.4
All private not-for-profit institutions	44.1	19.7	20.2	16.0
1992				
All institutions*	54.2	21.5	16.0	8.4
All 4-year institutions	55.0	23.4	17.5	4.1
All 2-year institutions	51.2	14.8	10.4	23.6
All public institutions	57.6	20.6	14.5	7.0
All private not-for-profit institutions	45.9	23.7	19.0	11.5

*All public and private not-for-profit Title IV degree-granting institutions in the 50 states and the District of Columbia.

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities). Percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1993 and 1999 (NSOPF:93 and NSOPF:99).

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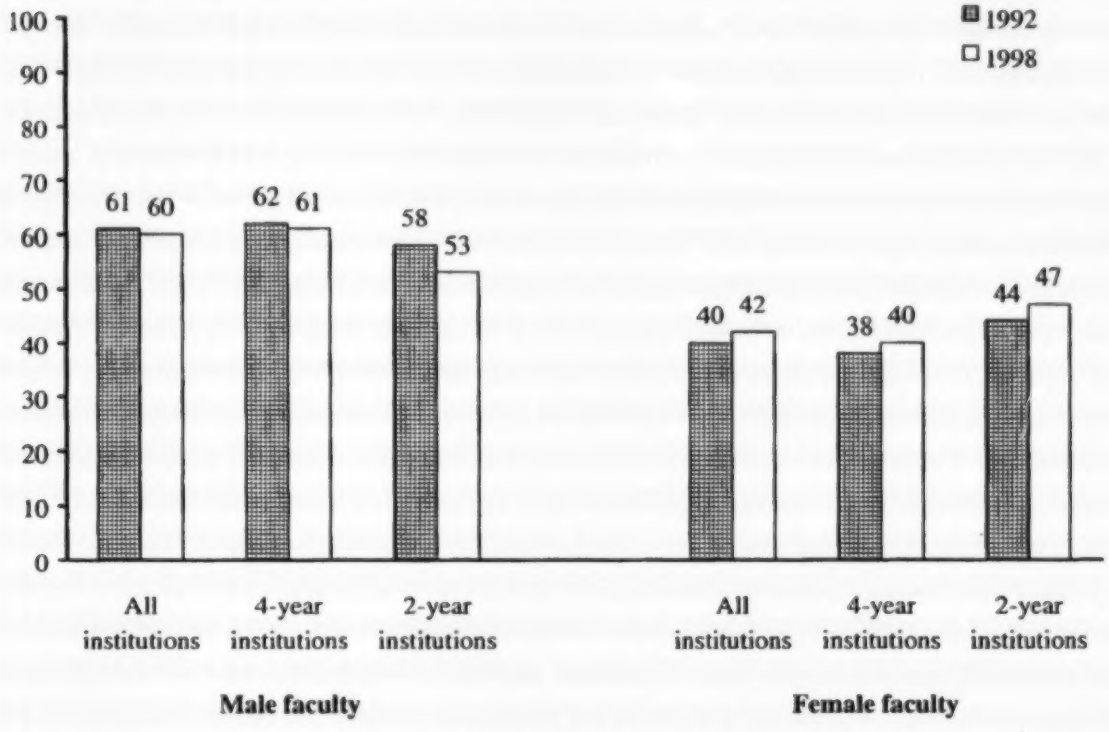
Tenure Status by Gender

The gender gap in tenure among full-time instructional faculty and staff found in previous studies was also apparent in both 1992 and 1998. Across postsecondary institutions in the fall of 1992, full-time male instructional faculty and staff were more likely than their female counterparts to report having tenure (61 percent of male faculty vs. 40 percent of female faculty; figure B). In the fall of 1998, 60 percent of male faculty, compared to 42 percent of female faculty, reported that they had tenure.

Gender differences in tenure were apparent at both 4-year and 2-year institutions in the fall of 1992 and the fall of 1998. For instance, in the fall of 1998, 61 percent of male faculty compared to 40 percent of female faculty were tenured at 4-year institutions, and 53 percent of male faculty compared to 47 percent of female faculty were tenured at 2-year institutions (figure B).

Figure B.—Percent of full-time instructional faculty and staff who were tenured, by gender and level of institution: Fall 1992 and fall 1998



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NOTE: This figure includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities).

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1993 and 1999 (NSOPF:93 and NSOPF:99).

Tenure Status by Race/Ethnicity

Like previous studies, NSOPF:99 found racial/ethnic differences in tenure status among full-time instructional faculty and staff. The NSOPF data also indicate some changes between 1992 and 1998.[5]

Among full-time instructional faculty and staff at postsecondary institutions in the fall of 1998, White, non-Hispanics were more likely than Black, non-Hispanics to report having tenure (54 vs. 44 percent; table B).[6] This pattern held for 4-year but not 2-year institutions.[7]

The distribution of tenure by race/ethnicity was somewhat different in the fall of 1998 than in the fall of 1992 (table B). Among full-time instructional faculty and staff in the fall of 1992, Whites were more likely to have tenure than were Asians/Pacific Islanders, Hispanics, and Blacks. By the fall of 1998, White faculty were more likely than Black faculty to have tenure, but not more likely than Asian/Pacific Islander and Hispanic faculty.

Table B.—Percent of full-time instructional faculty and staff who were tenured, by level of institution and race/ethnicity: Fall 1992 and fall 1998

Race /ethnicity[1]	1992			1998		
	All institutions[2]	4-year institutions	2-year institutions	All institutions[2]	4-year institutions	2-year institutions
All full-time instructional faculty and staff	54.2	55.0	51.2	53.1	53.9	49.8
American Indian/Alaska Native	43.0	39.0	47.8	29.4	31.3	#
Asian/Pacific Islander	47.1	44.9	60.3	49.1	48.1	57.1
Black, non-Hispanic	43.5	40.4	52.4	43.9	42.9	47.7
Hispanic	44.9	40.7	53.3	48.5	43.7	62.4
White, non-Hispanic	55.6	56.9	50.8	54.3	55.5	49.3

#Too small to report.

[1]In 1998, respondents were allowed to report more than one racial/ethnic category; however, very few (about 1 percent) respondents reported more than one category. Those persons were placed into the largest minority racial/ethnic category they selected (see the Technical Notes for more information).

[2]All public and private not-for-profit Title IV degree-granting institutions in the 50 states and the District of Columbia.

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities).

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1993 and 1999 (NSOPF:93 and NSOPF:99).

[5] In 1998, although respondents were allowed to report more than one racial/ethnic category, very few (about 1 percent) respondents reported more than one category (see the Technical Notes for more information).

[6] American Indian/Alaska Native respondents made up only 0.8 percent of the overall sample. Because the group is so small, analyses involving the comparison of this group to others, particularly if subdivided further, are inadvisable because the resulting standard errors are very large and very few apparent differences would achieve statistical significance. For this reason, this report excludes the American Indian/Alaska Native category from analysis, though estimates for this group are shown in the tables. For brevity, White, non-Hispanic and Black, non-Hispanic will be referred to as White and Black, respectively, throughout the report.

[7] Compared to 4-year institutions, estimates for 2-year institutions were based on small sample sizes and generally had large standard errors. Thus, some differences that appear large for 2-year institutions were less likely to be statistically significant.

Foreword

This publication utilizes data from the 1993 and 1999 National Study of Postsecondary Faculty (NSOPF:93 and NSOPF:99), a study of faculty and instructional staff at postsecondary institutions in the United States. The 1999 NSOPF and its predecessors, the 1988 and 1993 NSOPFs, were conducted by the National Center for Education Statistics within the U.S. Department of Education to fill the information gap about this important segment in postsecondary education. Additional support for NSOPF has been provided by the National Endowment for the Humanities and the National Science Foundation. Since its inception, NSOPF has stimulated wide interest at the federal, state, institution, and individual levels. Organizations and individual researchers have obtained data that provided them with national estimates and knowledge in general about faculty backgrounds, responsibilities, workloads, compensation, and attitudes.

A number of publications based on NSOPF:99 data are planned. Topics of these publications include the use of the Internet/technology by faculty, faculty and staff who taught classes to undergraduates, distance education taught by faculty, minority and women faculty, part-time faculty, and retirement and other departure plans of faculty.

As soon as publications are released from NSOPF, they can be found and downloaded at the NSOPF Web Site (http://nces.ed.gov/surveys/nsopf). Finally, researchers are encouraged to conduct their own in-depth analysis of the data. For information about using NSOPF:99 data, please read the Technical Notes to this report.

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Sample Survey Studies

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1. Introduction

In the recent past, postsecondary education has undergone dramatic changes that have influenced faculty staffing. These changes include the relative decline in enrollments of traditional students (i.e., students entering college directly out of high school), reductions in state funding, increased availability of distance education instruction and technologies, and increased use of contingent and contract personnel (Chronister and Baldwin 1999). These changes have required postsecondary institutions to examine new ways to effectively and efficiently manage their limited resources.

Faculty are both a primary resource and a major expense of postsecondary institutions (U.S. Department of Education 1999). Thus, any attempt to devise more efficient ways of managing resources requires a reexamination of key faculty issues such as salary, scholarly productivity, teaching performance, and tenure. To this end, postsecondary education institutions are reassessing their conventional relationships with instructional faculty and staff, especially the academic tenure system. Previous research has examined several factors associated with tenure status, including institutional or structural characteristics (e.g., institutional type) and faculty characteristics (e.g., employment status, rank, and gender) (U.S. Department of Education 2000).

Most of the research that examines tenure issues has been conducted by the U.S. Department of Education, National Center for Education Statistics (NCES), through two national studies: the National Study of Postsecondary Faculty (NSOPF), conducted in 1988, 1993, and 1999; and the Integrated Postsecondary Education Data System "Salaries, Tenure, and Fringe Benefits of Full-Time Instructional Faculty Survey" (IPEDS-SA), conducted annually since 1987. Previous NSOPF data suggest that while most postsecondary institutions have tenure systems for their faculty, about one-half of the full-time instructional faculty and staff are tenured, and the proportion of tenured faculty has been on a slight decline since the fall of 1987 (Lee 1995; U.S. Department of Education 1997; U.S. Department of Education 2000).

This report updates and expands previous studies by analyzing NSOPF data from 1992–93 and 1998–99 to assess changes in tenure status of full-time[1] instructional faculty and staff at public and private not-for-profit 2-year and above postsecondary institutions.[2] It analyzes changes in tenure status[3] by institutional level, type and control of institution, program area, and the faculty's academic rank, gender, and race/ethnicity.

Instructional faculty and staff are all faculty and staff with some for-credit teaching responsibilities (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities).[4] In order to place instructional faculty in the context of all faculty, the following general information is provided. Data from NSOPF:99 indicate that postsecondary institutions employed about 1.1 million (1,074,000) faculty in the fall of 1998 (figure 1). In the fall of 1992, according to NSOPF:93, there were

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[1]Terminology related to full- and part-time instructional faculty and staff references the employment status of the person at the institution rather than the amount of instruction the person did.

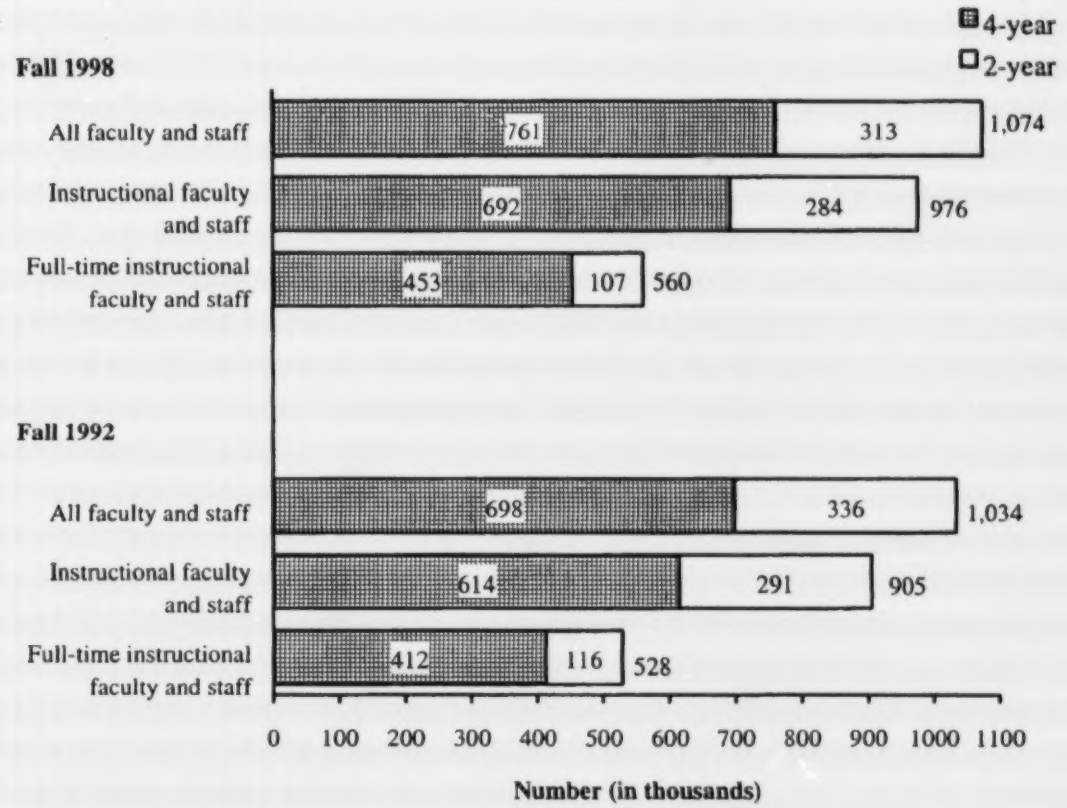
[2]For the remainder of the report, these institutions will be referred to as postsecondary institutions.

[3]NSOPF uses the following categories for tenure status: tenured; on tenure track, but not tenured; not on tenure track, although institution has tenure; and no tenure system at this institution. In the past, some researchers have combined two NSOPF categories (not on tenure track and no tenure system at institution) to report data on non-tenure-track faculty; however, these two categories are distinct, and the data are reported separately here for both fall 1992 (NSOPF:93) and fall 1998 (NSOPF:99).

[4]For brevity, this report sometimes uses the term "faculty" to refer to instructional faculty and staff.

an estimated 1,034,000 faculty at the nation's postsecondary institutions. Instructional faculty represented 91 percent (976,000) of all postsecondary faculty in the fall of 1998 and 88 percent (905,000) in the fall of 1992. The remainder of this report focuses on instructional faculty. The proportion of *full-time* instructional faculty was 57 percent in the fall of 1998 and 58 percent in the fall of 1992. Among full-time instructional faculty, the vast majority were employed by 4-year institutions in the fall of 1998 (81 percent or 453,000) and the fall of 1992 (78 percent or 412,000).

Figure 1.—Number of all faculty and staff, instructional faculty and staff, and full-time instructional faculty and staff at postsecondary institutions, by level of institution: Fall 1992 and fall 1998



SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1993 and 1999 (NSOPF:93 and NSOPF:99).

Across all postsecondary institutions, male faculty made up about two-thirds of full-time instructional faculty and staff in both the fall of 1998 (64 percent) and the fall of 1992 (67 percent; table 1). At 4-year institutions, males made up 67 percent of the faculty in the fall of 1998 and 70 percent of the faculty in the fall of 1992. At 2-year institutions, female faculty made up 50 percent of the faculty in 1998 and 46 percent of the faculty in 1992.

Most full-time instructional faculty and staff at postsecondary institutions were White, non-Hispanic.[5] In the fall of 1998, 85 percent of the faculty were White, 6 percent were Asian/Pacific Islander, 5 percent were Black, 3 percent were Hispanic, and 1 percent were American Indian/Alaska Native (table 1). In the fall of 1998, the natural sciences program area accounted for the highest proportion (20 percent) of full-time instructional faculty and staff, while agriculture/home economics accounted for the lowest proportion (2 percent) of full-time instructional faculty and staff.

The sections that follow present data on changes in tenure status among instructional faculty and staff at postsecondary institutions. Section 2 presents overall changes in tenure status, including changes for *all* postsecondary instructional faculty and staff, and for *full-time* instructional faculty and staff. The remainder of the report focuses on changes in tenure status of full-time instructional faculty and staff by various institutional and faculty characteristics. Section 3 presents differences by institutional characteristics (institutional type and program area[6]), while section 4 examines variations in tenure status by faculty characteristics (academic rank, gender, and race/ethnicity). The concluding section summarizes the findings of the study. Technical information, including a description of the NSOPF surveys, is presented in appendix A, while selected tables of standard errors are presented in appendix B.

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[5]Comparisons with American Indians/Alaska Natives are not discussed in this report because very few (about 1 percent) of the respondents identified themselves as American Indians/Alaska Natives in NSOPF:93 and NSOPF:99. For brevity, White, non-Hispanic and Black, non-Hispanic will be referred to as White and Black, respectively, throughout the report.

[6]Although program area might be viewed as a faculty rather than an institutional or structural characteristic, economists perceive academic discipline as largely a function of the labor market (i.e., supply and demand). Some educators have borrowed this concept (Broder 1993; U.S. Department of Education 2000).

Table 1.—Percentage distribution of full-time instructional faculty and staff, by level of institution and various faculty characteristics: Fall 1992 and fall 1998

Characteristic	Fall 1992			Fall 1998		
	All	4-year	2-year	All	4-year	2-year
All full-time instructional faculty	100	100	100	100	100	100
Program area						
Agriculture/home economics	2.2	2.4	0.1	1.9	1.9	0.9
Business	7.6	7.0	9.5	6.9	6.2	9.8
Education	7.0	7.3	6.0	7.1	7.7	4.8
Engineering	4.6	4.9	3.5	4.5	4.9	2.7
Fine arts	6.0	6.5	4.1	5.9	6.0	5.6
Health sciences	15.0	15.4	13.6	15.0	15.5	12.7
Humanities	14.0	13.1	17.1	14.4	13.9	16.5
Natural sciences	19.2	19.3	18.9	19.9	19.8	20.0
Social sciences	10.0	11.6	8.8	10.4	11.1	7.5
Vocational training	—	—	8.4	—	—	8.6
All other fields	9.9	10.8	6.7	11.0	11.6	8.9
Academic rank						
Full professor	30.4	33.6	19.0	30.7	32.9	21.4
Associate professor	23.4	26.3	13.0	23.6	26.3	12.1
Assistant professor	23.5	26.8	11.7	22.3	25.0	10.7
Instructor/lecturer	16.2	9.8	39.3	15.9	10.4	39.2
Other rank/not applicable[1]	6.4	3.5	17.0	7.5	5.4	16.6
Gender						
Male	66.8	70.2	54.4	63.7	67.0	50.0
Female	33.2	29.8	45.6	36.3	33.0	50.0
Race/ethnicity[2]						
American Indian/Alaska Native	0.5	0.3	1.0	0.7	0.7	#
Asian/Pacific Islander	5.2	5.8	3.4	5.8	6.4	3.3
Black, non-Hispanic	5.2	4.9	6.2	5.1	4.9	5.8
Hispanic	2.6	2.2	4.0	3.3	3.0	4.5
White, non-Hispanic	86.5	86.8	85.4	85.1	85.0	85.6

#Too small to report.

—Estimate was not reported for 4-year institutions.

[1]The "Other" category refers to faculty and staff with diverse academic ranks (e.g., adjunct faculty, deans, and research fellows) and those with no academic rank (i.e., not applicable). It does not include teaching assistants.

[2]In 1998, respondents were allowed to report more than one racial/ethnic category; however, very few respondents (about 1 percent) reported more than one category. Those persons were placed into the largest minority racial/ethnic category they selected (see appendix A for more information).

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities). Percentages may not sum to 100 due to rounding or missing data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1993 and 1999 (NSOPF:93 and NSOPF:99).

2. Tenure Status: Fall 1992 and Fall 1998

The literature examining issues of tenure status at postsecondary institutions—some of it anecdotal—suggests a decline in the proportion of tenured faculty in recent years (Lee 1995; Chronister and Baldwin 1999; U.S. Department of Education 1997). Data from the first two cycles of NSOPF, for instance, show that the proportion of full-time instructional faculty and staff who had tenure at postsecondary institutions decreased from 58 percent in the fall of 1987 to 54 percent in the fall of 1992 (U.S. Department of Education 1997). This report examines more recent data from the NSOPF:99 to explore changes in the tenure status of instructional faculty and staff since the fall of 1992.[7]

This section provides a brief description of the tenure status of all instructional faculty and staff. It also examines differences in tenure status among full-time and part-time instructional faculty and staff, and reports changes in tenure status among full-time instructional faculty and staff. The remainder of the report focuses on differences in tenure status among full-time instructional faculty and staff by various institutional and faculty characteristics.

All Instructional Faculty and Staff

In the fall of 1998, about one-third (32 percent) of all instructional faculty and staff at postsecondary institutions were tenured and 11 percent were in tenure-track positions (table 2). Another 44 percent of the faculty were not on a tenure track although the institution had a tenure system, and the remaining 13 percent taught in an institution that did not have a tenure system. Between the fall of 1992 and the fall of 1998,[8] the percentage of instructional faculty and staff who were on tenure track decreased from 13 to 11 percent, though there were no significant differences in the percentage of tenured instructional faculty and staff.

The distribution of tenure among all instructional faculty and staff may be clouded by the inclusion of part-time instructional faculty and staff because few institutions have policies to provide tenure to part-time faculty (Leslie and Walke 2001). Moreover, compared to part-time faculty, those who work full time typically have greater access to career advancement opportunities (e.g., research grants) that might make it easier for faculty members to meet the requirements for tenure.

Full Time Versus Part Time

The expectation that full-time faculty might hold a strong advantage in gaining tenure has been consistently borne out in past research (Lee 1995), and data from the 1993 and 1999 NSOPF surveys support this expectation. In both the fall of 1992 and the fall of 1998, tenure status was related to

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[7]The question wording for tenure status was slightly different in NSOPF:99 and NSOPF:93. In NSOPF:93, respondents were asked to indicate their tenure status from a list of five options—tenured, on tenure track but not tenured, not on tenure track, no tenure system for my faculty status, or no tenure system at this institution. In NSOPF:99, options 3 and 4 were collapsed into a single response category—not on tenure track, but institution has tenure system. For analyses in this report, the NSOPF:93 variable for tenure status was recoded to match the NSOPF:99 variable (see appendix C for a full description of the NSOPF:99 variable).

[8]NSOPF:99 was conducted in 1999 and asked faculty and instructional staff about their activities in the fall of 1998. NSOPF:93 was conducted in 1993 and asked faculty and staff about their activities in the fall of 1992.

employment status, with full-time instructional faculty and staff being considerably more likely than part-time faculty to report having tenure (table 2). In the fall of 1998, 53 percent of full-time instructional faculty and staff compared to 4 percent of part-time instructional faculty and staff had tenure.

Table 2.—Percentage distribution of all instructional faculty and staff, by tenure status and employment status: Fall 1992 and fall 1998

Employment status and year	Tenure status			
	Tenured	On tenure track	Not on tenure track	No tenure system
1998				
All instructional faculty	32.1	11.4	43.8	12.7
Full time	53.1	18.8	18.1	10.0
Part time	3.8	1.5	78.3	16.5
1992				
All instructional faculty	32.8	13.2	47.0	7.0
Full time	54.2	21.5	16.0	8.4
Part time	2.9	1.5	90.5	5.1

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities). Percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1993 and 1999 (NSOPF:93 and NSOPF:99).

Full-time instructional faculty and staff were also more likely than their part-time counterparts to report being on tenure track in both the fall of 1992 and the fall of 1998 (table 2). Nineteen percent of the faculty and staff who taught full time compared to 2 percent of those who taught part time were on tenure track in the fall of 1998.

The gap between tenured full-time and part-time instructional faculty and staff is a result of institutional policies regarding tenure for part-time faculty; few postsecondary institutions have tenure systems in place for part-time faculty (Leslie and Walke 2001). In both the fall of 1992 and the fall of 1998, part-time faculty had fewer opportunities for tenure, compared with their full-time counterparts. For example, part-time faculty were more likely than full-time faculty to work at institutions without tenure systems. In 1998, for instance, 17 percent of part-time postsecondary faculty compared to 10 percent of full-time faculty reported that their institutions did not have a tenure system in place. In fact, in both 1992 and 1998, about 95 percent of part-time instructional faculty did not have the opportunity to achieve tenure, either because they were not on a tenure track or because their institution did not have a tenure system. In comparison, the total percentage of full-time instructional faculty that did not have the opportunity for tenure was 28 percent in 1998 and 24 percent in 1992.

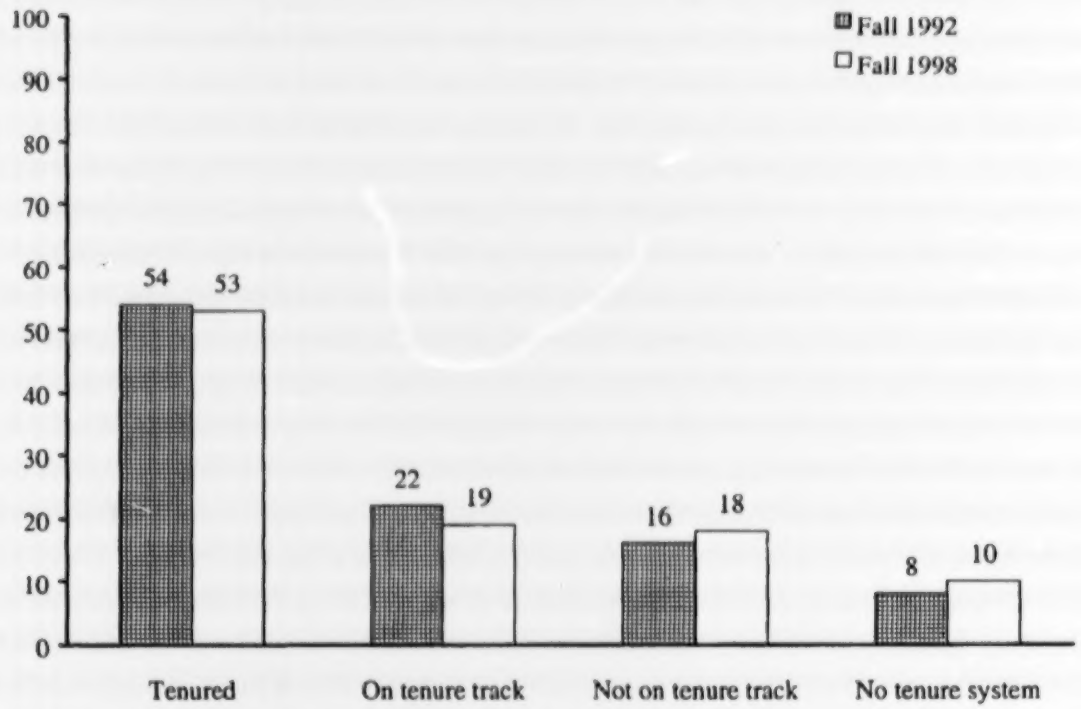
Tenure Status of Full-Time Instructional Faculty and Staff

The literature on tenure issues has focused primarily on full-time instructional faculty and staff whose terms of employment typically incorporate conditions for tenure. Thus, for the remainder of this report, the analyses will exclude part-time instructional faculty and staff.

Fifty-three percent of full-time instructional faculty and staff were tenured in the fall of 1998 (figure 2).[9] Another 19 percent were on tenure track but not tenured, while the remaining faculty were either not on a tenure track although the institution had a tenure system (18 percent), or they taught in an institution that did not have a tenure system (10 percent).

Between the fall of 1992 and the fall of 1998, while the proportion of full-time instructional faculty and staff on tenure track decreased from 22 to 19 percent, the total percentage of faculty who either were not on a tenure track or worked at institutions without a tenure system increased from 24 to 28 percent (figure 2).[10] Thus, whereas there were no significant differences in the percentage of tenured faculty between 1992 and 1998, the opportunities for future tenure declined during that period.

Figure 2.—Percentage distribution of full-time instructional faculty and staff, by tenure status: Fall 1992 and fall 1998



NOTE: This figure includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities).

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1993 and 1999 (NSOPF:93 and NSOPF:99).

[9]Data from the 1998–99 Integrated Postsecondary Education Data System "Salaries, Tenure, and Fringe Benefits of Full-Time Instructional Faculty Survey" (IPEDS-SA) indicate that 60 percent of full-time instructional faculty on 9- and 10-month contracts were tenured in the fall of 1998 (U.S. Department of Education 2001a). In order to be considered a faculty member in IPEDS, your principal activity must be instruction. In NSOPF, anyone with faculty status or instructional responsibility is included regardless of his/her principal activity.

[10]The increase in the percentage of full-time instructional faculty and staff who worked at institutions that did not have a tenure system (from 8 percent in 1992 to 10 percent in 1998) may be due, in part, to an overall increase in the proportion of postsecondary institutions that had no tenure systems in place for their faculty. Data from the Institution Survey of NSOPF indicate that 29 percent of postsecondary institutions did not have a tenure system in the fall of 1992 (U.S. Department of Education 1996), compared with 34 percent in the fall of 1998 (U.S. Department of Education 2001b).

3. Tenure Status by Institutional Characteristics

This section provides information concerning the tenure status of full-time instructional faculty and staff across 4-year and 2-year institutions, public and private institutions, and other institutional types (e.g., private not-for-profit research institutions).[11] It also examines differences in tenure status by academic programs.

Four-Year Versus 2-Year Institutions

In both the fall of 1992 and the fall of 1998, full-time faculty who taught at 4-year institutions were more likely than those who taught at 2-year institutions to hold tenure-track positions. However, in both years, there were no significant differences in the percentage of tenured faculty between 4-year and 2-year institutions (table 3).

The option for tenure was not equally accessible to full-time instructional faculty and staff at 4-year and 2-year postsecondary institutions. In both the fall of 1992 and the fall of 1998, faculty at 2-year institutions were more likely than faculty at 4-year institutions to report that their institutions did not have a tenure system (table 3). Six percent of full-time instructional faculty at 4-year institutions compared with 28 percent of those at 2-year institutions reported that their institutions did not have a tenure system in the fall of 1998.

Four-year institutions showed a decrease in the proportion of full-time instructional faculty and staff on tenure track from 23 percent in the fall of 1992 to 20 percent in the fall of 1998 (table 3). During the same time period, the proportion of faculty who were not on a tenure track increased at 4-year institutions (from 18 to 21 percent) but decreased at 2-year institutions (from 10 to 7 percent). Thus, between 1992 and 1998, while there were no significant differences in the proportion of *tenured* faculty for either 2- or 4-year institutions, the opportunities for future tenure declined at 4-year institutions.

Public Versus Private Institutions

Previous research suggests that faculty at public postsecondary institutions are more likely than those at private institutions to have tenure (Lee 1995). Data from NSOPF:93 and NSOPF:99 also indicate that in both the fall of 1992 and the fall of 1998, full-time instructional faculty and staff at public institutions were more likely than faculty at private institutions to be tenured (table 3). For example, 57 percent of the faculty employed in public institutions compared with 44 percent of those in private institutions reported having tenure in the fall of 1998.

Public and private institutions differed in the provision of tenure systems for their instructional faculty and staff in the fall of 1998; 7 percent of the faculty at public institutions compared with 16 percent of those at private institutions reported that their institutions did *not* have a tenure system (table 3). This means that full-time instructional faculty and staff at public institutions were more likely than those who taught at private institutions to have access to tenure systems in the fall of 1998.

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[11] Institutional types are based on the Carnegie classification and whether the institution is public or private not-for-profit. To improve readability, the phrase "private institutions" refers to private not-for-profit institutions. There were no private for-profit institutions in either NSOPF sample.

Between the fall of 1992 and the fall of 1998, the proportion of full-time instructional faculty and staff who were not on a tenure track at public institutions increased from 15 to 17 percent (table 3). Thus, between 1992 and 1998, whereas there were no significant differences in the percentage of tenured full-time instructional faculty at either public or private institutions, the opportunities for future tenure at public institutions declined.

Table 3.—Percentage distribution of all full-time instructional faculty and staff, by tenure status and level and control of institution: Fall 1992 and fall 1998

Level and control of institution and year	Tenure status			
	Tenured	On tenure track	Not on tenure track	No tenure system
1998				
All institutions*	53.1	18.8	18.1	10.0
All 4-year institutions	53.9	19.7	20.7	5.7
All 2-year institutions	49.8	15.1	7.2	27.9
All public institutions	56.9	18.5	17.2	7.4
All private not-for-profit institutions	44.1	19.7	20.2	16.0
1992				
All institutions*	54.2	21.5	16.0	8.4
All 4-year institutions	55.0	23.4	17.5	4.1
All 2-year institutions	51.2	14.8	10.4	23.6
All public institutions	57.6	20.6	14.5	7.0
All private not-for-profit institutions	45.9	23.7	19.0	11.5

*All public and private not-for-profit Title IV degree-granting institutions in the 50 states and the District of Columbia

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities). Percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1993 and 1999 (NSOPF:93 and NSOPF:99).

Type of Institution

In the fall of 1998, there were some differences in the tenure status of full-time instructional faculty and staff at postsecondary institutions by the type of institution (table 4). A higher percentage of full-time faculty at public comprehensive institutions had tenure (62 percent) than faculty at public 2-year institutions (51 percent), private doctoral institutions (42 percent), private liberal arts institutions (39 percent), and other institutions (41 percent).[12] The proportion of full-time instructional faculty and staff who were on tenure track at private not-for-profit comprehensive institutions decreased from 26 percent in the fall of 1992 to 18 percent in the fall of 1998.

Table 4.—Percentage distribution of full-time instructional faculty and staff, by tenure status and type of institution: Fall 1992 and fall 1998

Type of institution and year	Tenure status			
	Tenured	On tenure track	Not on tenure track	No tenure system
1998				
All institutions[1]	53.1	18.8	18.1	10.0
Public research	59.6	17.7	22.2	0.5
Private not-for-profit research	54.9	16.4	26.3	2.5
Public doctoral[2]	53.4	21.1	24.8	0.8
Private not-for-profit doctoral[2]	41.7	25.5	21.4	11.5
Public comprehensive	61.5	21.6	16.1	0.9
Private not-for-profit comprehensive	49.3	18.3	18.7	13.7
Private not-for-profit liberal arts	39.2	23.4	20.3	17.1
Public 2-year	51.0	15.4	7.2	26.4
Other[3]	41.1	16.2	13.2	29.4
1992				
All institutions[1]	54.2	21.5	16.0	8.4
Public research	63.4	19.7	16.5	0.3
Private not-for-profit research	49.8	22.9	26.5	0.9
Public doctoral[2]	53.6	26.7	19.5	0.2
Private not-for-profit doctoral[2]	45.6	27.1	21.6	5.8
Public comprehensive	60.7	24.5	14.4	0.4
Private not-for-profit comprehensive	52.9	26.1	16.0	5.1
Private not-for-profit liberal arts	46.0	25.4	17.7	10.9
Public 2-year	52.7	15.2	10.4	21.8
Other[3]	28.5	14.2	14.3	43.0

[1]All public and private not-for-profit Title IV degree-granting institutions in the 50 states and the District of Columbia.

[2]Includes institutions classified by the Carnegie Foundation as specialized medical schools and medical centers.

[3]Public liberal arts, private not-for-profit 2-year, and other specialized institutions, except medical schools and medical centers.

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities). Percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1993 and 1999 (NSOPF:93 and NSOPF:99).

[12]It is difficult to make reasonable comparisons with those institutions categorized as "other" because the institutions may be public or private, and may include nursing schools and other specialized types of institutions.

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Academic Program Area

Data from NSOPF:93 and NSOPF:99 suggest some differences in tenure status across academic program areas at postsecondary institutions. Among the various academic program areas at 4-year institutions in the fall of 1998, full-time instructional faculty and staff in agriculture/home economics were more likely to have tenure than full-time faculty in six of the program areas examined in the survey (table 5). About three-fourths (74 percent) of the faculty in agriculture/home economics had tenure compared with the proportions of tenured full-time faculty who taught courses in natural sciences (61 percent), fine arts (57 percent), humanities (55 percent), business (50 percent), education (47 percent), health sciences (39 percent), and "other" fields (52 percent). However, compared with the business and education program areas, the agriculture/home economics had a lower proportion of faculty who were on tenure track at 4-year institutions in 1998.

Table 5.—Percentage distribution of full-time instructional faculty and staff in 4-year institutions, by tenure status and program area: Fall 1992 and fall 1998

Program area and year	Tenure status			
	Tenured	On tenure track	Not on tenure track	No tenure system
1998				
All program areas in 4-year institutions	53.9	19.7	20.7	5.7
Agriculture/home economics	74.4	12.3	10.1	3.2
Business	49.9	23.3	18.8	8.0
Education	47.2	24.8	20.4	7.7
Engineering	67.0	21.4	9.9	1.7
Fine arts	57.3	20.9	13.2	8.5
Health sciences	39.0	19.2	35.3	6.5
Humanities	54.8	20.1	19.5	5.6
Natural sciences	60.6	18.7	16.1	4.6
Social sciences	63.3	19.9	12.4	4.4
All other fields	52.1	17.5	24.6	5.8
1992				
All program areas in 4-year institutions	55.0	23.4	17.5	4.1
Agriculture/home economics	72.4	19.3	7.6	0.7
Business	51.5	30.0	14.1	4.5
Education	54.9	23.6	18.8	2.7
Engineering	61.8	27.5	7.4	3.3
Fine arts	52.9	22.1	13.1	11.9
Health sciences	38.5	26.4	31.1	3.9
Humanities	59.9	18.7	17.1	4.3
Natural sciences	63.7	21.4	12.1	2.8
Social sciences	63.4	23.0	11.0	2.7
All other fields	49.1	25.7	20.4	4.8

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities). Percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1993 and 1999 (NSOPF:93 and NSOPF:99).

Between the fall of 1992 and the fall of 1998, there were few changes in tenure status by program area. At 4-year institutions, the percentage of full-time instructional faculty and staff in health sciences who were on tenure track decreased from 26 percent in 1992 to 19 percent in 1998 (table 5). At 2-year institutions, the proportion of full-time faculty and staff with tenure who taught courses in education decreased from 56 percent in the fall of 1992 to 36 percent in the fall of 1998 (table 6).[13]

Table 6.—Percentage distribution of full-time instructional faculty and staff in 2-year institutions, by tenure status and program area: Fall 1992 and fall 1998

Program area and year	Tenure status			
	Tenured	On tenure track	Not on tenure track	No tenure system
1998				
All program areas in 2-year institutions	49.8	15.1	7.2	27.9
Agriculture/home economics	49.1	17.4	4.7	28.9
Business	47.7	9.2	6.0	37.1
Education	36.0	18.0	12.0	34.1
Engineering	42.9	27.5	5.2	24.4
Fine arts	49.4	22.4	6.7	21.5
Health sciences	42.6	16.7	9.4	31.3
Humanities	55.8	16.6	6.2	21.4
Natural sciences	54.5	16.1	4.0	25.4
Social sciences	57.7	11.4	5.9	25.0
Vocational training	47.0	10.0	6.7	36.3
All other fields	48.4	13.0	11.7	26.9
1992				
All program areas in 2-year institutions	51.2	14.8	10.4	23.6
Agriculture/home economics	60.9	12.2	9.4	17.6
Business	54.3	9.9	10.7	25.1
Education	55.7	14.4	12.0	17.9
Engineering	41.8	25.6	6.1	26.5
Fine arts	57.1	10.7	9.2	23.0
Health sciences	37.8	16.2	12.4	33.6
Humanities	56.7	13.9	7.3	22.1
Natural sciences	57.1	15.7	7.6	19.6
Social sciences	51.5	15.7	11.1	21.8
Vocational training	47.5	12.3	13.0	27.3
All other fields	47.9	21.5	9.5	21.1

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities). Percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1993 and 1999 (NSOPF:93 and NSOPF:99).

[13]Compared to 4-year institutions, estimates for 2-year institutions were based on small sample sizes and generally had large standard errors. Thus, some of the other differences that appear large for 2-year institutions were less likely to be statistically significant.

4. Tenure Status by Faculty Characteristics

Prior studies suggest that the granting of tenure is related to various faculty characteristics, such as the faculty's level of employment and gender (Lee 1995; U.S. Department of Education 1997, 2000). This section examines changes in tenure status among full-time instructional faculty and staff across selected faculty characteristics—academic rank, gender, and race/ethnicity.

Academic Rank

The expectation for an association between tenure status and academic rank has been substantiated by past research (Lee 1995; U.S. Department of Education 2000). In institutions with tenure systems, opportunities for tenure and improved academic rank are contingent on a common pool of requirements for career advancement. These requirements include academic qualifications, scholarly productivity, length of service and experience, amount of administrative responsibility, and teaching performance (U.S. Department of Education 2000). However, the association between academic rank and tenure is, in part, a result of institutional policies because some postsecondary institutions do not have tenure systems in place (Leslie and Walke 2001).

Overall, differences in faculty tenure status by academic rank have persisted in recent years (table 7). In both the fall of 1992 and the fall of 1998, full and associate professors were more likely than faculty from all other levels of appointment to report having tenure. In the fall of 1998, 90 percent of full-time instructional faculty and staff with full professorships and about three-fourths (76 percent) of associate professors were tenured. In contrast, 14 percent of assistant professors and 16 percent of instructors/lecturers were tenured in the fall of 1998.[14]

With regard to tenure-track positions, assistant professors were more likely than faculty from all other ranks to be in tenurable positions (table 7). The proportion of full-time instructional faculty and staff who were on tenure track in the fall of 1998 was 2 percent for full professors, 58 percent for assistant professors, 11 percent for associate professors, and 13 percent for instructors/lecturers.

Differences in tenure status by academic rank were apparent at 4-year and, to a lesser extent, 2-year institutions (table 7). In the fall of 1998, the proportion of full-time instructional faculty and staff at 4-year institutions who reported having tenure was 91 percent for full professors, 76 percent for associate professors, 11 percent for assistant professors, and 3 percent for instructors/lecturers. At 2-year institutions, full and associate professors were more likely than assistant professors and instructors/lecturers to be tenured in the fall of 1998.

[14]It is difficult to make reasonable comparisons with faculty and staff who have "other" academic ranks because this category represents a very diverse group (e.g., adjunct faculty, deans, and research fellows) and those with no academic rank (or not applicable).

Across all postsecondary institutions, the proportion of full-time instructors/lecturers in tenure-track positions declined from 18 in the fall of 1992 to 13 percent in the fall of 1998 (table 7). This decline might be due to the decrease in tenure-track instructors/lecturers at 4-year institutions (from 14 to 7 percent). Thus, among instructors/lecturers, the opportunities for future tenure at 4-year institutions declined between 1992 and 1998.

Table 7.—Percentage distribution of full-time instructional faculty and staff, by tenure status and level of institution and academic rank: Fall 1992 and fall 1998

Level of institution and academic rank	Tenure status							
	1992				1998			
	Tenured	On tenure track	Not on tenure track	No tenure system	Tenured	On tenure track	Not on tenure track	No tenure system
All institutions[1]								
All full-time instructional faculty	54.2	21.5	16.0	8.4	53.1	18.8	18.3	10.0
Full professor	90.3	2.5	2.9	4.3	90.1	2.1	3.7	4.2
Associate professor	76.4	12.6	6.4	4.6	76.3	11.4	6.7	5.7
Assistant professor	14.8	61.6	18.4	5.3	14.2	57.6	20.7	7.5
Instructor/lecturer	21.1	18.0	43.7	17.3	16.1	12.8	49.0	22.1
Other rank/not applicable[2]	29.6	6.3	33.8	30.3	23.3	8.1	39.9	28.7
4-year institutions								
All full-time instructional faculty	55.0	23.4	17.5	4.1	53.9	19.7	20.7	5.7
Full professor	91.5	2.6	3.0	2.9	91.0	1.9	4.1	2.9
Associate professor	76.9	13.4	6.5	3.2	76.3	11.6	7.3	4.8
Assistant professor	11.5	65.0	19.7	3.8	11.1	60.1	22.2	6.6
Instructor/lecturer	5.5	14.0	75.5	5.0	2.9	7.2	83.5	6.4
Other rank/not applicable[2]	10.5	5.8	62.6	21.1	14.3	4.4	59.7	21.6
2-year institutions								
All full-time instructional faculty	51.2	14.8	10.4	23.6	49.8	15.1	7.2	27.9
Full professor	83.1	2.0	2.3	12.7	83.6	3.0	1.1	12.4
Associate professor	72.9	6.8	6.0	14.3	75.9	9.8	0.7	13.7
Assistant professor	41.7	33.7	7.7	16.9	44.3	33.4	6.2	16.0
Instructor/lecturer	34.9	21.4	15.6	28.1	30.7	19.2	10.4	39.7
Other rank/not applicable[2]	43.5	6.6	13.0	37.0	35.8	13.1	12.8	38.4

[1]All public and private not-for-profit Title IV degree-granting institutions in the 50 states and the District of Columbia.

[2]The "Other" category refers to faculty and staff with diverse academic ranks (e.g., adjunct faculty, deans, and research fellows) and those with no academic rank (or not applicable). It does not include teaching assistants.

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities). Percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1993 and 1999 (NSOPF:93 and NSOPF:99).

Gender

Previous research on postsecondary faculty and staff has shown a persistent gap in the distribution of tenure among male and female faculty, with men more likely than women to have tenure (Lee 1995; U.S. Department of Education 2000). The literature points to several factors that contribute to the gender gap in tenure status: compared to men, women were more likely to teach part time, to teach in community colleges, and to have been on the job for fewer years, on average (Lee 1995). In addition, a recent analysis of NSOPF:93 data showed that women were less likely than men to have earned a doctorate degree, and more likely to spend a larger proportion of their time on teaching and service activities than on research and administrative activities (U.S. Department of Education 2000). To explore changes in the gender gap in tenure at postsecondary institutions, the distribution of tenure among male and female faculty and staff was examined using data from NSOPF:93 and NSOPF:99.

The gender gap in tenure status among full-time instructional faculty and staff in 1992 was also apparent in 1998 (table 8). Among full-time faculty and staff who taught across postsecondary institutions in the fall of 1992, men were more likely than women to report having tenure (61 percent of male faculty vs. 40 percent of female faculty). In the fall of 1998, 60 percent of male faculty compared to 42 percent of female faculty and staff reported that they had tenure.[15] Differences in the proportion of tenured male and female faculty were apparent at both 4-year and 2-year institutions in the fall of 1992 and the fall of 1998.

Table 8.—Percentage distribution of full-time instructional faculty and staff, by tenure status and level of institution and gender: Fall 1992 and fall 1998

Level of institution and gender	Tenure status							
	1992				1998			
	Tenured	On tenure track	Not on tenure track	No tenure system	Tenured	On tenure track	Not on tenure track	No tenure system
All institutions*								
All full-time instructional faculty	54.2	21.5	16.0	8.4	53.1	18.8	18.1	10.0
Male	61.3	19.3	12.6	6.8	59.7	17.1	14.7	8.5
Female	39.7	26.0	22.8	11.5	41.6	21.8	24.1	12.5
4-year institutions								
All full-time instructional faculty	55.0	23.4	17.5	4.1	53.9	19.7	20.7	5.7
Male	62.2	20.8	13.3	3.8	60.9	17.4	16.2	5.5
Female	38.0	29.7	27.5	4.7	39.6	24.5	29.8	6.1
2-year institutions								
All full-time instructional faculty	51.2	14.8	10.4	23.6	49.8	15.1	7.2	27.9
Male	57.7	12.5	9.3	20.6	52.7	15.6	6.1	25.7
Female	43.6	17.4	11.8	27.1	47.0	14.6	8.2	30.2

*All public and private not-for-profit Title IV degree-granting institutions in the 50 states and the District of Columbia.

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities). Percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1993 and 1999 (NSOPF:93 and NSOPF:99).

[15]Data from the 1998–99 Integrated Postsecondary Education Data System "Salaries, Tenure, and Fringe Benefits of Full-Time Instructional Faculty Survey" (IPEDS-SA) indicate that among full-time instructional faculty on 9- and 10-month contracts in the fall of 1998, 67 percent of men and 48 percent of women were tenured (U.S. Department of Education 2001a).

The gender gap in tenured faculty is partly due to the fact that female faculty were more likely than their male counterparts to report that they were not on a tenure track (table 8). Across postsecondary institutions in 1998, 24 percent of female full-time instructional faculty and staff compared to 15 percent of male faculty indicated that they were not on a tenure track. Female faculty were also more likely than male faculty to work in institutions that did not have a tenure system in the fall of 1998.

Between 1992 and 1998, the proportion of female faculty on tenure track declined from 26 to 22 percent across all postsecondary institutions, and it declined from 30 to 25 percent at 4-year institutions (table 8).

Race/Ethnicity

Research examining racial/ethnic differences in tenure status among postsecondary faculty indicate that Black, Hispanic, and American Indian/Alaska Native faculty members are less likely than White faculty to have tenure (U.S. Department of Education 2000). Data from NSOPF:99 show some differences by race/ethnicity[16] in the proportion of faculty who were tenured (table 9). Across all postsecondary institutions, White faculty were more likely than Black faculty to report having tenure in the fall of 1998; 54 percent of White faculty were tenured compared with 44 percent of Black faculty.[17] This difference in tenure status by race/ethnicity held for full-time instructional faculty and staff at 4-year but not 2-year institutions.[18]

Racial/ethnic differences in tenure status changed somewhat between the fall of 1998 and the fall of 1992 (table 9). Across all postsecondary institutions, whereas White faculty members were more likely than Asians/Pacific Islanders, Hispanics, and Blacks to report having tenure in the fall of 1992 (56 percent vs. 47, 45, and 44 percent, respectively), the tenure gap between Whites and minority groups was significant only for Blacks in the fall of 1998. These patterns held for 4-year but not 2-year institutions.

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[16]In 1998, although respondents were allowed to report more than one racial/ethnic category, very few (about 1 percent) respondents reported more than one category (see the Technical Notes for more information).

[17]Comparisons with American Indians/Alaska Natives are not discussed in this report because very few (about 1 percent) of the respondents identified themselves as American Indians/Alaska Natives in NSOPF:93 and NSOPF:99.

[18]Compared to 4-year institutions, estimates for 2-year institutions were based on small sample sizes and generally had large standard errors. Thus, some differences that appear large for 2-year institutions were less likely to be statistically significant.

Table 9.—Percentage distribution of full-time instructional faculty and staff, by tenure status and level of institution and race/ethnicity: Fall 1992 and fall 1998

Level of institution and race/ethnicity	Tenure status							
	1992				1998[1]			
	Tenured	On tenure track	Not on tenure track	No tenure system	Tenured	On tenure track	Not on tenure track	No tenure system
All institutions[2]								
All full-time instructional faculty	54.2	21.5	16.0	8.4	53.1	18.8	18.1	10.0
American Indian/Alaska Native	43.0	26.5	16.6	13.9	29.4	34.4	24.2	12.0
Asian/Pacific Islander	47.1	29.1	19.3	4.6	49.1	29.8	17.1	4.0
Black, non-Hispanic	43.5	29.1	22.1	5.4	43.9	26.1	20.6	9.3
Hispanic	44.9	34.5	14.5	6.1	48.5	22.1	22.9	6.5
White, non-Hispanic	55.6	20.2	15.5	8.8	54.3	17.4	17.8	10.5
4-year institutions								
All full-time instructional faculty	55.0	23.4	17.5	4.1	53.9	19.7	20.7	5.7
American Indian/Alaska Native	39.0	33.6	26.8	0.6	31.3	31.8	29.2	7.7
Asian/Pacific Islander	44.9	30.8	21.1	3.1	48.1	30.1	18.8	3.0
Black, non-Hispanic	40.4	34.2	24.0	1.4	42.9	28.2	23.7	5.3
Hispanic	40.7	40.4	17.2	1.7	43.7	24.6	29.0	2.7
White, non-Hispanic	56.9	21.9	16.9	4.4	55.5	18.2	20.3	6.0
2-year institutions								
All full-time instructional faculty	51.2	14.8	10.4	23.6	49.8	15.1	7.2	27.9
American Indian/Alaska Native	47.8	17.8	4.4	30.1	#	#	#	#
Asian/Pacific Islander	60.3	18.3	8.0	13.4	57.1	27.3	3.5	12.1
Black, non-Hispanic	52.4	14.6	16.7	16.4	47.7	18.8	9.8	23.8
Hispanic	53.3	22.7	9.1	14.9	62.4	15.0	5.2	17.4
White, non-Hispanic	50.8	14.2	10.2	24.8	49.3	14.1	7.3	29.4

#Too small to report.

[1]In 1998, respondents were allowed to report more than one racial/ethnic category; however, very few (about 1 percent) respondents reported more than one category. Those persons were placed into the largest minority racial/ethnic category they selected (see the Technical Notes for more information).

[2]All public and private not-for-profit Title IV degree-granting institutions in the 50 states and the District of Columbia.

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities). Percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1993 and 1999 (NSOPF:93 and NSOPF:99).

5. Summary

Tenure systems have been viewed as important for academic freedom and the maintenance of academic meritocracy. The NSOPF data indicate that in the fall of 1992 and the fall of 1998, a slight majority of full-time instructional faculty and staff were tenured (54 and 53 percent, respectively), and most of the faculty and staff were at postsecondary institutions that had tenure systems.

Between the fall of 1992 and the fall of 1998, while there were no significant differences in the percentage of tenured faculty, the opportunities for future tenure declined. The proportion of full-time instructional faculty and staff on tenure track decreased from 22 to 19 percent, and the total percentage of faculty who either were not on a tenure track or worked at institutions without a tenure system increased from 24 to 28 percent.

As suggested by the literature, faculty tenure status was somewhat related to institutional level and control (4-year vs. 2-year and public vs. private). In both the fall of 1992 and the fall of 1998, full-time instructional faculty and staff at 4-year institutions were more likely than those at 2-year institutions to be on tenure track and to work at institutions with tenure systems. Moreover, full-time instructional faculty and staff employed at public institutions were more likely than those at private institutions to have tenure in 1992 and 1998.

While there were no significant differences in the proportion of *tenured* faculty between 1992 and 1998 for either 2- or 4-year institutions, the opportunities for future tenure declined at 4-year institutions. Between the fall of 1992 and the fall of 1998, 4-year institutions showed both a decrease in the proportion of full-time instructional faculty and staff who were on tenure track, and an increase in the total percentage of faculty who either were not on a tenure track or worked at institutions without a tenure system.

Tenure status was also related to various faculty characteristics—academic rank, gender, and race/ethnicity. Across postsecondary institutions, full-time instructional faculty and staff with the highest levels of employment (full and associate professors) were more likely to be tenured than faculty from lower academic ranks.

The gender gap in tenure found in previous studies also was apparent in both 1992 and 1998. For instance, across postsecondary institutions in the fall of 1998, full-time male instructional faculty and staff were more likely than their female counterparts to report having tenure. There were significant gender differences in tenure status at 4-year and 2-year institutions. Between 1992 and 1998, the proportion of female faculty on tenure track declined across postsecondary institutions, and at 4-year institutions.

The distribution of tenure by race/ethnicity was somewhat different in the fall of 1998 than in the fall of 1992. Among full-time instructional faculty and staff in the fall of 1992, Whites were more likely to have tenure than Asians/Pacific Islanders, Hispanics, and Blacks. By the fall of 1998, White faculty were more likely than Black faculty to have tenure, but not more likely than Asian/Pacific Islander and Hispanic faculty.

References

Broder, I.E. (1993). Professional Achievements and Gender Differences Among Academic Economists. *Economic Inquiry* 31 (1): 116-127.

Carnegie Foundation for the Advancement of Teaching. (1994). *A Classification of Institutions of Higher Education*. Princeton, NJ.

Chronister, J.L., and Baldwin, R.G. (1999). Marginal or Mainstream? Full-Time Faculty Off the Tenure Track. *Liberal Education* 85 (4): 16–23.

Lee, J. (1995). *Tenure*. Washington, DC: National Education Association.

Leslie, D.W., and Walke, J.T. (2001). *Out of the Ordinary: The Anomalous Academic*. Sloan Foundation Report. Available at http://www.wm.edu/education/Faculty/Leslie/anomacad.html.

Shah, B.V., Barmwell, B.G., and Bieler, G.S. (1995). *SUDAAN User's Manual, Release 6.4*. Research Triangle Park, NC: Research Triangle Institute.

U.S. Department of Education, National Center for Education Statistics. (1993). *A Note from the Chief Statistician*, no. 2.

U.S. Department of Education, National Center for Education Statistics. (1996). *1993 National Study of Postsecondary Faculty (NSOPF:93): Institutional Policies and Practices Regarding Faculty in Higher Education*, NCES 97-080, by Rita J. Kirshstein, Nancy Matheson, Zhongren Jing, and Linda J. Zimbler. Washington, DC.

U.S. Department of Education, National Center for Education Statistics. (1997). *Instructional Faculty and Staff in Higher Education Institutions: Fall 1987 and Fall 1992*, NCES 97-470, by Rita J. Kirshstein, Nancy Matheson, and Zhongren Jing. Project Officer, Linda J. Zimbler. Washington, DC.

U.S. Department of Education, National Center for Education Statistics. (1999). *Salaries and Tenure of Full-Time Instructional Faculty on 9- and 10-Month Contracts 1997-1998*, NCES 1999-193, by Patricia Brown. Washington, DC.

U.S. Department of Education, National Center for Education Statistics. (2000). *Salary, Promotion, and Tenure Status of Minority and Women Faculty in U.S. Colleges and Universities*, NCES 2000-173, by Michael Nettles, Laura Perna, and Ellen M. Bradburn. Project Officer, Linda J. Zimbler. Washington, DC.

U.S. Department of Education, National Center for Education Statistics. (2001a). *Salaries and Tenure of Full-Time Instructional Faculty on 9- and 10-Month Contracts 1998–1999*, NCES 2001–181, by Rosa Fernandez and Samuel Barbett. Washington, DC.

U.S. Department of Education, National Center for Education Statistics. (2001b). *Institutional Policies and Practices: Results From the 1999 National Study of Postsecondary Faculty, Institution Survey*, NCES 2001-201, by Andrea Berger, Rita J. Kirshstein, and Elizabeth Rowe. Project Officer, Linda J. Zimbler, Washington, DC.

U.S. Department of Education, National Center for Education Statistics. (2002). *1999 National Study of Postsecondary Faculty (NSOPF:99): Methodology Report*, NCES 2002-154, by Sameer Y. Abraham, Darby Miller Steiger, Margarethe Montgomery, Brian D. Kuhr, Roger Tourangeau, Bob Montgomery, and Manas Chattopadhyay. Washington, DC.

Appendix A

Technical Notes

Appendix A
Technical Notes

Overview

Since the fall of 1987, the National Center for Education Statistics (NCES) of the U.S. Department of Education has sponsored three cycles of the National Study of Postsecondary Faculty (NSOPF) to provide national profiles of postsecondary faculty, including their professional backgrounds, responsibilities, workloads, salaries, benefits, and attitudes. This report analyzes data from the second and third cycles of NSOPF.

The first cycle (NSOPF:88), conducted in 1987–88, sampled 480 institutions (including 2-year, 4-year, doctorate-granting, and other colleges and universities), over 3,000 department chairpersons, and over 11,000 faculty. The second cycle (NSOPF:93), administered in 1992–93, was limited to surveys of institutions and faculty, but with a substantially expanded sample of 974 public and private, not-for-profit degree-granting postsecondary institutions and 31,354 faculty and instructional staff.[1] A similar sample was designed for the most recent study (NSOPF:99); it included 960 degree-granting postsecondary institutions and a final sample of 19,813 faculty and instructional staff from those institutions. Additional information about NSOPF is available at the http://nces.ed.gov/surveys/nsopf/ Web Site.

Institution and Faculty Universe

The NSOPF:99 institution universe included (1) Title IV degree-granting institutions;[2] (2) public and private, not-for-profit institutions;[3] (3) institutions that confer associate's, bachelor's, or advanced degrees, and (4) institutions that are located in the United States. The universe excluded institutions that offered only less-than-2-year programs, those that were private for-profit, and those located outside the United States (for example, in U.S. territories). It also excluded institutions that offer instruction only to employees of the institutions, tribal colleges, and institutions that offer only correspondence courses.

While the NSOPF:88 was restricted to instructional faculty, the faculty universe for NSOPF:93 and NSOPF:99 included all those who were designated as faculty, whether or not their responsibilities included instruction, and other (nonfaculty) personnel with instructional responsibilities. Thus, the second and third NSOPF cycles included researchers and administrators and other institutional staff who held faculty positions (but who did not teach), as well as instructional staff without faculty status. Teaching assistants were not included in any cycle of NSOPF.

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[1]For more details on the sample and methodology for NSOPF:93, see the technical section of a statistical analysis report: U.S. Department of Education. (1997). *Instructional Faculty and Staff in Higher Education Institutions: Fall 1987 and Fall 1992* (NCES 97-470).

[2]The U.S. Department of Education is no longer distinguishing among institutions based on accreditation level as used in 1987 and 1992. As a result, NCES now subdivides the postsecondary institution universe into schools that have participation agreements with the U.S. Department of Education for Title IV federal financial assistance and those that do not have such agreements.

[3]Private for-profit institutions are not included in NSOPF even though they may be Title IV degree-granting institutions.

Sample Selection

As in NSOPF:93, the NSOPF:99 sample was selected through a two-stage stratified, clustered probability design. The first-stage sampling frame consisted of the 3,396 postsecondary institutions in the Integrated Postsecondary Education Data System (IPEDS) [4] "Fall Staff" surveys that were public or private, not-for-profit Title IV institutions and provided formal degree programs of at least 2 years' duration. The 3,396 institutions in the NSOPF:99 universe were stratified based on the highest degrees they offered and the amount of federal research dollars they received. These strata distinguished public and private institutions, as well as several types of institutions based on the Carnegie Foundation's classification system.[5] The following institutional categories were used in this report:

- **Public research:** Publicly controlled institutions among the leading universities in federal research funds. Each of these universities awards substantial numbers of doctorates across many fields.

- **Private not-for-profit research:** Privately controlled not-for-profit institutions among the leading universities in federal research funds. Each of these universities awards substantial numbers of doctorates across many fields.

- **Public doctoral:** Publicly controlled institutions that offer a full range of baccalaureate programs and doctoral degrees in at least three disciplines, but tend to be less focused on research and receive fewer federal research dollars than the research universities. In this report, this group also includes publicly controlled institutions classified by the Carnegie Foundation as specialized medical schools.

- **Private not-for-profit doctoral:** Privately controlled not-for-profit institutions that offer a full range of baccalaureate programs and doctoral degrees in at least three disciplines, but tend to be less focused on research and receive fewer federal research dollars than the research universities. In this report, this group also includes privately controlled institutions classified by the Carnegie Foundation as specialized medical schools.

- **Public comprehensive:** Publicly controlled institutions that offer liberal arts and professional programs; these institutions offer a full range of baccalaureate programs and are committed to graduate education through the master's degree. They award 20 or more master's degrees annually in one or more disciplines.

- **Private not-for-profit comprehensive:** Privately controlled not-for-profit institutions that offer liberal arts and professional programs; these institutions offer a full range of baccalaureate programs and are committed to graduate education through the master's degree. They award 20 or more master's degrees annually in one or more disciplines.

- **Private not-for-profit liberal arts:** Privately controlled not-for-profit institutions that are smaller than comprehensive colleges and universities; these institutions primarily offer bachelor's degrees, although some offer master's degrees.

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[4]For more information on IPEDS data, see the NCES Web Site (http://nces.ed.gov/ipeds).

[5]See Carnegie Foundation for the Advancement of Teaching. (1994). *A Classification of Institutions of Higher Education*. Princeton, NJ.

- **Public 2-year:** Publicly controlled institutions that offer certificate or degree programs only through the associate's degree level.

- **Other:** Public liberal arts, private 2-year,[6] and religious and other specialized institutions, except medical.

Respondents and Response Rates

Each of the sampled institutions was asked to complete an institution questionnaire and provide lists of all faculty and instructional staff at their institution during the 1998 fall term. Of the 960 institutions in the sample, 1 was ineligible because it had merged with another institution. A total of 865 institutions returned the institution questionnaire, for a weighted response rate of 92.8 percent. Institution weights were based on the inverse of the institutional probability of selection. A total of 818 institutions provided lists of faculty and instructional staff, for a weighted list participation rate of 88.4 percent.

A sample of 19,813 faculty and instructional staff were selected for the faculty survey. Approximately 17,600 faculty and instructional staff questionnaires were completed for a weighted response rate of 83.0 percent. The overall weighted faculty response rate (institution list participation rate multiplied by the faculty questionnaire response rate) was 73.4 percent.[7]

Data Analysis System

The estimates presented in this report were produced using the NSOPF:99 Data Analysis Systems (DAS). The DAS software makes it possible for users to specify and generate their own tables from the NSOPF:99 data. With the DAS, users can replicate or expand upon the tables presented in this report. In addition to the table estimates, the DAS calculates proper standard errors[8] and weighted sample sizes for these estimates. For example, appendix table B2 contains standard errors that correspond to table 3 in the essay of this report, and was generated by the DAS. If the number of valid cases is too small to produce a reliable estimate (less than 30 cases), the DAS prints the message "low-N" instead of the estimate.

In addition to tables, the DAS will also produce a correlation matrix of selected variables to be used for linear regression models. Included in the output with the correlation matrix are the design effects (DEFTs) for each variable in the matrix. Since statistical procedures generally compute regression coefficients based on simple random sample assumptions, the standard errors must be adjusted with the design effects to take into account the NSOPF:99 stratified sampling method.

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[6]Public liberal arts and private not-for-profit 2-year institutions have been placed in the "other" category because there are relatively few of them in the United States.

[7]For a full description of faculty and item nonresponse, see U.S. Department of Education (2002). *1999 National Study of Postsecondary Faculty (NSOPF:99): Methodology Report.* (NCES 2002-154). Washington, DC.

[8]The NSOPF:99 samples are not simple random samples and, therefore, simple random sample techniques for estimating sampling error cannot be applied to these data. The DAS takes into account the complexity of the sampling procedures and calculates standard errors appropriate for such samples. The method for computing sampling errors used by the DAS involves approximating the estimator by the linear terms of a Taylor series expansion. The procedure is typically referred to as the Taylor series method.

The DAS can be accessed electronically at http:www//nces.ed.gov/DAS. For more information about the NSOPF:99 Data Analysis System, contact:

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Sources of Error and Statistical Procedures Used

The survey estimates provided in the NSOPF:99 analytical reports are subject to two sources of error: sampling errors and nonsampling errors. Sampling errors occur because the estimates are based on a sample of individuals in the population rather than on the entire population. The standard error measures the variability of the sample estimator that would occur if it were estimated on many different samples of the same population.

Standard errors for all estimates presented in this report's tables were computed using a technique known as Taylor series approximation. Standard errors for selected characteristics are presented in appendix tables B1–B4. Standard errors for all other estimates presented in this report are available upon request. The DAS software as well as other specialized computer programs, such as SUDAAN[9] and CENVAR[10] calculate variances with the Taylor series approximation method.

Since the estimates in this report are based on a sample, observed differences between two estimates can reflect either of two possibilities: differences that exist in the population at large and are reflected in the sample, or differences due solely to the composition of the sample that do not reflect underlying population differences. To minimize the risk of erroneously interpreting differences due to sampling alone as signifying population differences (a Type I error), the statistical significance of differences between estimates was tested using a *t*-test. Statistical significance was determined by calculating *t* values for differences between pairs of means or proportions and comparing these with published values of *t* for two-tailed hypothesis testing, using a 5 percent probability of a Type I error (a significance level of .05).[11]

The *t* values may be computed to test the difference between estimates with the following formula:

$$t = \frac{E_1 - E_2}{\sqrt{se_1^2 + se_2^2}} \qquad (1)$$

[9]Shah, B.V., Barnwell, B.G., and Bieler, G.S. (1995). *SUDAAN User's Manual, Release 6.4*. Research Triangle Park, NC: Research Triangle Institute.

[10]U.S. Bureau of the Census, *CENVAR IMPS Version 3.1* (Washington, DC: U.S. Bureau of the Census), 1995.

[11]A Type I error occurs when one erroneously concludes that a difference observed in a sample reflects a true difference in the population from which the sample was drawn.

where E_1 and E_2 are the estimates to be compared and se_1 and se_2 are their corresponding standard errors. Note that this formula is valid only for independent estimates. When estimates are not independent, a covariance term must be added to the formula:

$$\frac{E_1 - E_2}{\sqrt{se_1^2 + se_2^2 - 2(r)se_1 se_2}} \tag{2}$$

where r is the correlation between the two variables.[12] The denominator in this formula will be at its maximum when the two estimates are perfectly negatively correlated, that is, when $r = -1$. This means that a conservative dependent test may be conducted by using -1 for the correlation in this formula, or

$$t = \frac{E_1 - E_2}{\sqrt{(se_1)^2 + (se_2)^2 + 2se_1 se_2}}. \tag{3}$$

The estimates and standard errors are obtained from the DAS.

There are hazards in reporting statistical tests for each comparison. First, comparisons based on large t statistics may appear to merit special attention. This can be misleading since the magnitude of the t statistic is related not only to the observed differences in means or percentages, but also to the number of sample members in the specific categories used for comparison. Hence, a small difference compared across a large number of sample members would produce a large t statistic.

A second hazard in reporting statistical tests for each comparison occurs when making multiple comparisons between categories of an independent variable. For example, when making paired comparisons between different levels of income, the probability of a Type I error for these comparisons taken as a group is larger than the probability for a single comparison. When more than one difference between groups of related characteristics or "families" are tested for statistical significance, one must apply a standard that assures a level of significance for all of those comparisons taken together.

Comparisons were made in this report only when $p \leq .05/k$ for a particular pairwise comparison, where that comparison was one of k tests within a family. This guarantees both that the individual comparison would have $p \leq .05$ and that for k comparisons within a family of possible comparisons, the significance level for all the comparisons would sum to $p \leq .05$.[13]

For example, when comparing males and females, only one comparison is possible. In this family, k=1, and there is no need to adjust the significance level. When faculty members are divided into five racial/ethnic groups and all possible comparisons are made, then k=10, and the significance level for each test within this family of comparisons must be $p \leq .05/10$, or $p \leq .005$. The formula for calculating family size (k) is as follows:

$$k = \frac{j(j-1)}{2} \tag{4}$$

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[12]U.S. Department of Education, National Center for Education Statistics. (1993). *A Note from the Chief Statistician*, no. 2.

[13]The standard that $p \leq .05/k$ for each comparison is more stringent than the criterion that the significance level of the comparisons should sum to $p \leq .05$. For tables showing the t statistic required to ensure that $p \leq .05/k$ for a particular family size and degrees of freedom, see Olive Jean Dunn, Multiple Comparisons Among Means, *Journal of the American Statistical Association* 56 (1961): 52–64.

where j is the number of categories for the variable being tested. For example, in the case of a variable with five categories such as race/ethnicity, one substitutes 5 for j in equation 4:

$$k = \frac{5(5-1)}{2} = 10$$

Different schools of thought exist on the application of the Bonferroni adjustment: while some would use an experiment-wise calculation of k, where all the dependent variables were considered simultaneously in selecting a critical value, here the calculation of k and the accompanying critical value were restricted to a single dependent variable at a time, since the Bonferroni adjustment is already a conservative strategy.

Sample estimates also are subject to bias from nonsampling errors. It is more difficult to measure the magnitude of these errors. They can arise for a variety of reasons: nonresponse, undercoverage, differences in the respondent's interpretation of the meaning of questions, memory effects, misrecording of responses, incorrect editing, coding, and data entry, time effects, or errors in data processing. Whereas general sampling theory can be used, in part, to determine how to estimate the sampling variability of a statistic, nonsampling errors are not easy to measure. Measurement of nonsampling errors usually requires the incorporation of a methodological experiment into the survey or the use of external data to assess and verify survey results.

To minimize the potential for nonsampling errors, the faculty and institution questionnaires (as well as the sample design, data collection, and data processing procedures) were field-tested with a national probability sample of 162 postsecondary institutions and 512 faculty members in 1997–98. An extensive item nonresponse analysis was also conducted followed by additional evaluation of the instruments and survey procedures (see U.S. Department of Education 2002).

In addition, for the full-scale surveys, a computer-based editing system was used to check data for range errors, logical inconsistencies, and skip patterns that were not properly followed by respondents. For improperly followed skip patterns, values were logically assigned on the basis of the presence or absence of responses within the skip pattern, given the responses. Some small inconsistencies between different data elements remained in the data files. In these situations, it was impossible to resolve the ambiguity as reported by the respondent.

Appendix B

Tables of Standard Errors

Appendix B
List of Standard Error Tables

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B1	Standard errors for figure 1, the number of all faculty and staff, instructional faculty and staff, and full-time instructional faculty and staff at postsecondary institutions, by level of institution: Fall 1992 and fall 1998	B-5
B2	Standard errors for table 3, the percentage distribution of full-time instructional faculty and staff, by tenure status and level and control of institution: Fall 1992 and fall 1998	B-6
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Table B1.—Standard errors for figure 1, the number of all faculty and staff, instructional faculty and staff, and full-time instructional faculty and staff at postsecondary institutions, by level of institution: Fall 1992 and fall 1998

Type of faculty and staff and year	Level of institution		
	4-year	2-year	All institutions
1998			
All faculty and staff	6,683	4,659	8,147
Instructional faculty and staff	6,618	4,527	8,018
Full-time instructional faculty and staff	5,024	2,268	5,512
1992			
All faculty and staff	3,188	2,205	3,876
Instructional faculty and staff	3,745	2,471	4,487
Full-time instructional faculty and staff	3,208	1,666	3,615

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1993 and 1999 (NSOPF:93 and NSOPF:99).

Table B2.—Standard errors for table 3, the percentage distribution of full-time instructional faculty and staff, by tenure status and level and control of institution: Fall 1992 and fall 1998

Level and control of institution and year	Tenure status			
	Tenured	On tenure track	Not on tenure track	No tenure system
1998				
All institutions*	0.86	0.53	0.63	0.80
All 4-year institutions	0.95	0.59	0.74	0.76
All 2-year institutions	2.06	1.14	0.72	2.44
All public institutions	0.93	0.57	0.74	0.72
All private not-for-profit institutions	1.83	1.15	1.23	2.15
1992				
All institutions*	0.80	0.51	0.51	0.67
All 4-year institutions	0.84	0.59	0.62	0.55
All 2-year institutions	2.09	1.03	0.67	2.18
All public institutions	0.95	0.57	0.55	0.74
All private not-for-profit institutions	1.43	1.10	1.10	1.48

*All public and private not-for-profit Title IV degree-granting institutions in the 50 states and the District of Columbia.

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities).

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1993 and 1999 (NSOPF:93 and NSOPF:99).

Table B3.—Standard errors for table 4, the percentage distribution of full-time instructional faculty and staff, by tenure status and type of institution: Fall 1992 and fall 1998

Type of institution and year	Tenure status			
	Tenured	On tenure track	Not on tenure track	No tenure system
1998				
All institutions[1]	0.86	0.53	0.63	0.80
Public research	1.58	0.85	1.52	0.13
Private not-for-profit research	3.18	2.11	3.21	1.08
Public doctoral[2]	2.18	1.57	1.90	0.46
Private not-for-profit doctoral[2]	3.49	2.82	2.79	3.95
Public comprehensive	1.75	1.27	1.29	0.40
Private not-for-profit comprehensive	3.56	1.76	2.26	4.27
Private not-for-profit liberal arts	3.67	2.32	1.96	4.44
Public 2-year	2.08	1.17	0.74	2.43
Other[3]	4.18	2.99	2.38	5.95
1992				
All institutions	0.80	0.51	0.51	0.67
Public research	1.79	1.18	1.41	0.17
Private not-for-profit research	2.94	2.36	3.07	0.42
Public doctoral[2]	1.60	1.39	1.42	0.13
Private not-for-profit doctoral[2]	3.36	3.55	3.23	1.58
Public comprehensive	1.35	0.94	0.86	0.15
Private not-for-profit comprehensive	2.32	1.69	1.45	1.97
Private not-for-profit liberal arts	2.76	1.80	1.44	3.22
Public 2-year	2.12	1.06	0.69	2.16
Other[3]	4.56	2.26	1.55	6.20

[1]All public and private not-for-profit Title IV degree-granting institutions in the 50 states and the District of Columbia.

[2]Includes institutions classified by the Carnegie Foundation as specialized medical schools and medical centers.

[3]Public liberal arts, private not-for-profit 2-year, and other specialized institutions, except medical schools and medical centers.

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities).

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1993 and 1999 (NSOPF:93 and NSOPF:99).

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Table B4.—Standard errors for table 7, the percentage distribution of full-time instructional faculty and staff, by tenure status and level of institution and academic rank: Fall 1992 and Fall 1998

Level of institution and academic rank	Tenure status							
	1992				1998			
	Tenured	On tenure track	Not on tenure track	No tenure system	Tenured	On tenure track	Not on tenure track	No tenure system
All institutions[1]								
All full-time instructional faculty	0.80	0.54	0.51	0.67	0.86	0.53	0.63	0.80
Full professor	0.89	0.34	0.33	0.69	0.87	0.42	0.50	0.63
Associate professor	1.17	0.83	0.59	0.63	1.36	1.02	0.72	0.80
Assistant professor	0.83	1.27	1.06	0.78	1.06	1.50	1.34	1.00
Instructor/lecturer	1.57	1.25	1.65	1.60	1.53	1.18	2.14	2.03
Other rank/not applicable[2]	2.80	1.11	2.88	3.09	2.22	1.14	2.84	3.38
4-year institutions								
All full-time instructional faculty	0.83	0.60	0.63	0.55	0.95	0.60	0.74	0.76
Full professor	0.91	0.38	0.37	0.67	0.92	0.47	0.57	0.62
Associate professor	1.21	0.90	0.64	0.51	1.47	1.10	0.79	0.81
Assistant professor	0.77	1.32	1.15	0.70	1.01	1.58	1.44	0.99
Instructor/lecturer	0.89	1.44	1.97	1.21	0.60	1.11	1.90	1.38
Other rank/not applicable[2]	2.85	2.14	5.86	5.51	2.07	1.11	4.84	5.30
2-year institutions								
All full-time instructional faculty	2.09	1.05	0.67	2.18	2.04	1.14	0.72	2.43
Full professor	3.08	0.60	0.68	2.69	2.45	0.84	0.43	2.37
Associate professor	3.74	1.46	1.60	3.35	3.46	2.05	0.43	3.17
Assistant professor	3.66	3.73	1.35	3.77	4.93	4.53	1.52	4.42
Instructor/lecturer	2.65	2.00	1.27	2.61	2.81	2.15	1.33	3.46
Other rank/not applicable[2]	3.85	1.16	2.17	3.68	3.82	2.12	2.10	4.21

[1]All public and private not-for-profit Title IV degree-granting institutions in the 50 states and the District of Columbia.

[2]The "Other" category refers to faculty and staff with diverse academic ranks (e.g., adjunct faculty, deans, and research fellows) and those with no academic rank (or not applicable). It does not include teaching assistants.

NOTE: This table includes only faculty and staff with instructional responsibilities for credit (e.g., teaching one or more classes for credit, or advising or supervising students' academic activities).

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Study of Postsecondary Faculty, 1993 and 1999 (NSOPF:93 and NSOPF:99).

Appendix C

Glossary of Terms

Glossary of Terms

This glossary describes the variables used in this report. The variables listed in the index below are in the order they appear in the report; the glossary is in alphabetical order by DAS label displayed along the left-hand column.

Glossary Index to Variables Used in This Report

Variable	Page Number in Report
Tenure status	5–19
Full- or part-time employment	5–6
Institutional type	11
Institutional level and control	9–10
Principal field of teaching (Program area)	12–13
Academic rank	15–16
Gender	17
Race/ethnicity	18–19

Glossary of Terms (NSOPF: 99 and NSOPF: 93)

Academic rank **X01Z8 in NSOPF: 99 and X10A9 in NSOPF: 93**

This variable identifies a respondent's academic rank, title, or position at his/her sampled institution or to identify the fact that ranks are not assigned.

Full professor
Associate professor
Assistant professor
Instructor/lecturer
Other ranks/not applicable

Full- or part-time employment at this institution **Q5 in NSOPF:99 and A4 in NSOPF:93**

Faculty response to the question, "During the 1998 Fall Term, did this institution consider you to be employed part-time or full- time?"

Part-time
Full-time

Gender **Q81 in NSOPF:99 and F51 in NSOPF:93**

Male
Female

Institutional control **X02Z0 in NSOPF:99 and X01Z1 in NSOPF:93**

This variable was used to identify control of institution according to a modified Carnegie classification. The 1994 Carnegie classification was used. See a description of each type of Carnegie classification under the Sample Design section of the Technical Notes.

Public research	control=public and carnegie=11 or 12
Private research	control=private and carnegie=11 or 12
Public doctoral	control=public and carnegie=13, 14, or 52
Private doctoral	control=private and carnegie=13, 14, or 52
Public comprehensive	control=public and carnegie=21 or 22
Private comprehensive	control=private and carnegie=21 or 22
Private liberal arts	control=private and carnegie=31 or 32
Public 2-year	control=public and carnegie=40
Other	control=public and carnegie=31 or 32, or control=private and carnegie=40, or carnegie=51 or 53-65

Institutional level, 4-year versus 2-year **X06Z0 in NSOPF:99 and X06 in NSOPF:93**

This derived variable reflects the level of institution (2- or 4-year) sampled for NSOPF:99.

Four-year
Two-year

Principal field of teaching	**4-year institutions**	**X02Z14 in NSOPF:99 and X01A12 in NSOPF:93**
	2-year institutions	**X01Z14 in NSOPF:99 and X02A12 in NSOPF:93**

To identify the general program area of a respondent's principal field of teaching, this variable was created from variable Q14 in NSOPF:99, and Q12 in NSOPF:93. The variables are somewhat different for 4-year and 2-year institutions because vocational training is offered by 2-year but not 4-year institutions.

Program in 4-year institutions	**Program in 2-year institutions**
Agriculture & home economics	Agriculture & home economics
Business	Business
Education	Education
Engineering	Engineering
Fine arts	Fine arts
Health sciences	Health sciences
Humanities	Humanities
Natural sciences	Natural sciences
Social sciences	Social sciences
All other programs	Vocational training
	All other programs

Race/ethnicity, recoded **X03Z84 in NSOPF:99 and X02F53 in NSOPF:93**

This derived variable was created to categorize individuals into one and only one racial/ethnic category. In NSOPF:88 and NSOPF:93, respondents were asked to pick only one race category to identify themselves. They also were asked to identify if they were of Hispanic origin. In NSOPF:99, respondents were asked to pick one or more race categories to identify themselves. They also were asked to identify if they were of Hispanic origin. Very few individuals picked more than one racial/ethnic category (about 1 percent). For those individuals who picked more than one racial/ethnic category, a coding scheme was devised to place them into one and only one racial/ethnic category. If respondents identified themselves as Hispanic and Black or Hispanic and White, they were coded as Hispanic. Otherwise, they were coded according to the following scheme: If respondents indicated they were Black or African American and any other race, they were coded as Black. If they were Asian or Pacific Islander and any other race (except for Black), they were coded as Asian. If they were American Indian or Alaska Native and any other race (except for Black or Asian), they were coded as American Indian.

American Indian or Alaska Native
Asian or Pacific Islander
Black, not of Hispanic origin
Hispanic
White, not of Hispanic origin

Tenure status **Q10 in NSOPF:99 and QA7 in NSOPF:93**

The question wording for tenure status was slightly different in NSOPF:99 and NSOPF:93. In NSOPF:93, respondents were asked to indicate their tenure status from a list of five options—tenured, on tenure track but not tenured, not on tenure track, no tenure system for my faculty status, no tenure system at this institution. In NSOPF:99, options 3 and 4 were collapsed into a single response category to read "not on tenure track, but institution has tenure system." For analyses in this report, the NSOPF:93 variable for tenure status was recoded to match the NSOPF:99 variable.

What was your tenure status at this institution during the 1998 Fall Term?

Tenured
On tenure track, but not tenured
Not on tenure track, but institution has tenure system
No tenure system at this institution

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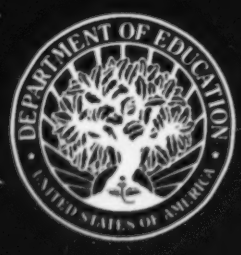

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